

# CR30X series cylindrical capacitive sensor



## Feature description

- Integrated housing matches double highlighted LED indicator
- IP67 protection class which is effectively moisture-proof and dust-proof
- Enhance detection distance. Sensitivity adjustment adopts multi-turn potentiometer so as to reach higher adjustment accuracy
- High reliability, excellent EMC design with protection against short circuit, overloaded and reverse polarity
- Widely used in both metal and non-metal (plastic, powder, liquid, etc.) material testing



## Model specification

|           |               |           |               |
|-----------|---------------|-----------|---------------|
| NPN NO    | CR30XCN25DNOY | PNP NO    | CR30XCN25DPOY |
| NPN NC    | CR30XCN25DNCY | PNP NC    | CR30XCN25DPCY |
| NPN NO+NC | CR30XCN25DNRY | PNP NO+NC | CR30XCN25DPRY |

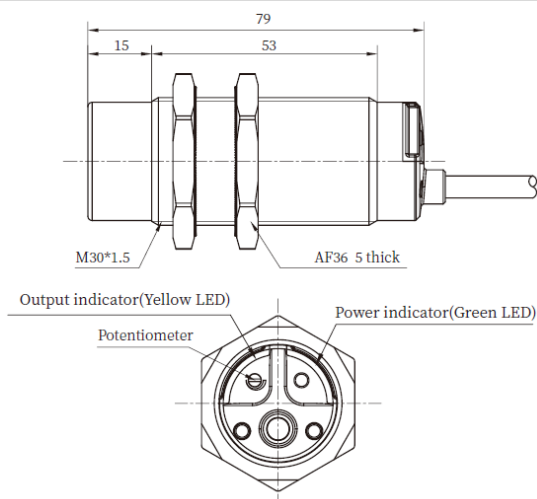
## Specifications

|                            |                                                |                         |                                                         |
|----------------------------|------------------------------------------------|-------------------------|---------------------------------------------------------|
| Installation type          | Non-flush                                      | Indicator               | Output indication:Yellow LED;Power indicator:Green LED  |
| Rated distance $S_n$       | 25mm <sup>①</sup>                              |                         | Overload or short circuit indication:Yellow LED flashes |
| Ensure distance $S_a$      | ≤18mm                                          | Switching frequency     | 25Hz                                                    |
| Adjust the distance        | 4...30mm                                       | Ambient temperature     | When working:-25...70°C(No icing, No condensation)      |
| Adjustment method          | Multi-turn potentiometer                       |                         | When storing:-30...80°C(No icing, No condensation)      |
|                            | (Electrical adjustment > 10)                   | Environment humidity    | 35...95%RH(No icing, No condensation)                   |
| Standard test object       | Fe 75*75*1t(Grounded) <sup>②</sup>             | Vibration resistant     | 10...55Hz,Dual amplitude 1mm(2 hours                    |
| Supply voltage             | 10...30VDC                                     |                         | each in X, Y, and Z directions)                         |
| Load current               | ≤200mA                                         | Impulse withsand        | 30g/11ms,3 times each for X,Y,Z direction               |
| Residual voltage           | ≤2V                                            | High pressure resistant | 1000V/AC 50/60Hz 60s                                    |
| Consumption current        | ≤20mA                                          | Insulation resistance   | ≥50MΩ(500VDC)                                           |
| Switch point offset [%/Sr] | ≤±10%                                          | Shape specification     | M30*1.5*79mm                                            |
| Temperature drift [%/Sr]   | ≤±20%                                          | Protection degree       | IP67                                                    |
| Hysteresis range [%/Sr]    | 3...20%                                        | Housing material        | Nickel copper alloy                                     |
| Repetitive error [R]       | ≤5%                                            | Connection type         | 2m PVC Cable                                            |
| Circuit protection         | Short circuit protection, Overload protection, | Accessories             | M30 nuts×2, Slotted screwdriver, Operation manual       |
|                            | Reverse polarity protection                    |                         |                                                         |

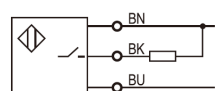
Note: ①the factory default sensing distance is  $S_n \pm 10\%$

②unit:mm

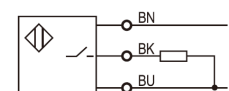
## Dimensions



## Wiring diagram



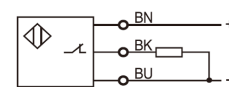
NPN NO



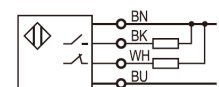
PNP NO



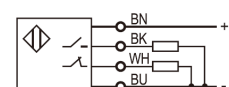
NPN NC



PNP NC



NPN NO+NC



PNP NO+NC